

2015 Consumer Confidence Report

Water System Name:	CITY OF CALIFORNIA CITY	Report Date:	July 1, 2016
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We test the drinking water quality for many constituents as required by state and federal regulations. This report shows the results of our monitoring for the period of January 1 - December 31, 2015 and may include earlier monitoring data.

Este informe contiene información muy importante sobre su agua potable. Tradúzcalo ó hable con alguien que lo entienda bien.

Type of water source(s) in use:	Six Ground Water Wells And One Surface Water Source
Name & general location of source(s):	Well #2a, Well #10, Well#14, Well #15a and Well #16 are located in the First Community and Surface Water Source Trunk is located on California City Boulevard at Randsburg-Mojave Road.
Drinking Water Source Assessment information:	Available at: 21000 Hacienda Boulevard California City, CA 93505
Time and place of regularly scheduled board meetings for public participation:	Second and Fourth Tuesday of the month at 6:00 pm California City City Hall, 21000 Hacienda Boulevard, California City, CA 93505
For more information, contact:	Craig C. Platt, Public Works Director Phone: (760) 373-7297

TERMS USED IN THIS REPORT

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the PHGs (or MCLGs) as is economically and technologically feasible. Secondary MCLs are set to protect the odor, taste, and appearance of drinking water.

Maximum Contaminant Level Goal (MCLG): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the U.S. Environmental Protection Agency (USEPA).

Public Health Goal (PHG): The level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the California Environmental Protection Agency.

Maximum Residual Disinfectant Level (MRDL): The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Maximum Residual Disinfectant Level Goal (MRDLG): The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

Primary Drinking Water Standards (PDWS): MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

Secondary Drinking Water Standards (SDWS): MCLs for contaminants that affect taste, odor, or appearance of the drinking water. Contaminants with SDWSs do not affect the health at the MCL levels.

Treatment Technique (TT): A required process intended to reduce the level of a contaminant in drinking water.

Regulatory Action Level (AL): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

Variances and Exemptions: Department permission to exceed an MCL or not comply with a treatment technique under certain conditions.

ND: not detectable at testing limit

ppm: parts per million or milligrams per liter (mg/L)

ppb: parts per billion or micrograms per liter (µg/L)

ppt: parts per trillion or nanograms per liter (ng/L)

ppq: parts per quadrillion or picogram per liter (pg/L)

pCi/L: picocuries per liter (a measure of radiation)

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring

minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in source water include:

- *Microbial contaminants*, such as viruses and bacteria, that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- *Inorganic contaminants*, such as salts and metals, that can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- *Pesticides and herbicides*, that may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
- *Organic chemical contaminants*, including synthetic and volatile organic chemicals, that are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, agricultural application, and septic systems.
- *Radioactive contaminants*, that can be naturally-occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, the USEPA and the California Department of Public Health (Department) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. Department regulations also establish limits for contaminants in bottled water that provide the same protection for public health.

Tables 1, 2, 3, 4, 5, 7, and 8 list all of the drinking water contaminants that were detected during the most recent sampling for the constituent. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. The Department allows us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of the data, though representative of the water quality, are more than one year old.

TABLE 1 – SAMPLING RESULTS SHOWING THE DETECTION OF COLIFORM BACTERIA

Microbiological Contaminants (complete if bacteria detected)	Highest No. of Detections	No. of months in violation	MCL	MCLG	Typical Source of Bacteria
Total Coliform Bacteria	(In a mo.) 0	0	More than 1 sample in a month with a detection	0	Naturally present in the environment
Fecal Coliform or <i>E. coli</i>	(In the year) 0	0	A routine sample and a repeat sample detect total coliform and either sample also detects fecal coliform or <i>E. coli</i>	0	Human and animal fecal waste

TABLE 2 – SAMPLING RESULTS SHOWING THE DETECTION OF LEAD AND COPPER

Lead and Copper (complete if lead or copper detected in the last sample set)	Sample Date	No. of samples collected	90 th percentile level detected	No. sites exceeding AL	AL	PHG	Typical Source of Contaminant
Lead (ppb)	2015	19	0.074	0	15	0.2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper (ppm)	2015	20	0.020	0	1.3	0.3	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

TABLE 3 – SAMPLING RESULTS FOR SODIUM AND HARDNESS

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Sodium (ppm)	2014	146	140-160	none	none	Salt present in the water and is generally naturally occurring
Hardness (ppm)	2014	91.8	79-110	none	none	Sum of polyvalent cations present in the water, generally magnesium

						and calcium, and are usually naturally occurring
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*Any violation of an MCL or AL is asterisked. Additional information regarding the violation is provided later in this report.

TABLE 4 – DETECTION OF CONTAMINANTS WITH A PRIMARY DRINKING WATER STANDARD

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL [MRDL]	PHG (MCLG) [MRDLG]	Typical Source of Contaminant
Arsenic (ppm)	2014	.0059	.0044-.0067	0.10	0.04	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes.
Barium (ppm)	2014	.0272	.021-.031	1.0	2	Discharge of oil drilling wastes and from metal refineries; erosion of natural deposits
Fluoride (ppm)	2014	1.5	1.3-1.7	2.0	1	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Selenium (ppm)	2014	.00199	.00199-.00199	1.050	0.050	Discharge from petroleum, glass and metal refineries; erosion of natural deposits; discharge from mines and chemical manufacturers; runoff from livestock lots (feed additives)
Nitrate	2015	2.86	1.9-4.6	45	45	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits

TABLE 5 – DETECTION OF CONTAMINANTS WITH A SECONDARY DRINKING WATER STANDARD

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Aluminum (ppb)	2014	77.2	49-190	200	n/a	Erosion of natural deposits; residual from some surface water treatment process
Bicarbonate (ppm)	2014	222.0	200-230	n/a	n/a	n/a
Calcium (ppm)	2014	25.2	21-28	n/a	n/a	n/a
Alkalinity (ppm)	2014	182	170-190	n/a	n/a	n/a
Chloride (ppm)	2014	79.0	69-94	500	n/a	Substance that form ions when in water, seawater influence
Foaming Agents [MBAS] (ppm)	2014	.1118	.09-.19	5.0	n/a	n/a
Iron (ppb)	2014	239.2	49-1000	300	n/a	Leaching from natural deposits
Magnesium (ppm)	2014	7.02	6.1-8.6	n/a	n/a	n/a
Manganese (ppb)	2014	10.32	9.9-12	50	n/a	Leaching from natural deposits
PH	2014	8.218	8.18-8.26	n/a	n/a	n/a
Specific Conductance (uS/cm)	2014	804.8	780-836	1600	n/a	Substance that form ions when in water; seawater influence

Sulfate (ppm)	2014	93	89-96	500	n/a	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids [TDS]	2014	608.6	530-803	1,000	n/a	Runoff/leaching from natural deposits
Turbidity (NTU)	2014	.1052	.09-.13		n/a	Soil runoff
Potassium (ppm)	2014	2.78	2.5-3.1	n/a	n/a	n/a
Zinc (ppm)	2014	.049	.049-.049	5.0	n/a	Runoff/leaching from natural deposits; industrial wastes

TABLE 6 – DETECTION OF RADIOACTIVE CONTAMINANTS

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	Notification Level	Health Effects Language
Alpha Emitters (pCi/L)	2014	6.294	4.42-8.83	15	Erosion of natural deposits
Uranium	2015	5.78	5.1-6.9	30	Erosion of natural deposits

*Any violation of an MCL, MRDL, or TT is asterisked. Additional information regarding the violation is provided later in this report.

TABLE 7 - DETECTION OF TRIHALOMETHANES AND HALOACETIC ACIDS (VOC)

Chemical or Constituent (and reporting units)	Sample Date	Level Range	Notification Level	Typical Source of Contaminant
Total Trihalomethanes [TTHM] (ppb) (LRAA)	2015	0.0-16.2	80	By-product of drinking water Chlorination
Haloacetic Acids [HAA5] (ppb) (LRAA)	2015	0.0-4.18	60	By-product of drinking water Chlorination

Violation

NONE

TABLE 8 – DETECTION OF UNREGULATED CONTAMINANTS MONITORING RULE (UCMR3)

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	Notification Level	Health Effects Language
Chromium (ppb)	2014	10.74	9.9-14	n/a	
Molybdenum (ppb)	2013	80.1	1.9-150	n/a	
Strontium (ppb)	2013	286.5	210-390	n/a	
Vanadium (ppb)	2013	13.2	2.8-23	n/a	
Chromium-6 (ppb)	2015	6.28	2.5-9.0	n/a	
Chlorate (ppb)	2013	262.2	30-420	n/a	

Additional General Information on Drinking Water

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the USEPA's Safe Drinking Water Hotline (1-800-426-4791).

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. USEPA/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

Arsenic; Some people who drink water containing arsenic in excess of the MCL over many years may experience skin damage or circulatory system problems, and may have an increased risk of getting cancer.
Barium; Some people who drink water containing barium in excess of the MCL over many years may experience an increase in blood pressure.
Fluoride; Some people who drink water containing fluoride in excess of the federal MCL of 4 mg/L over many years may get bone disease, including pain and tenderness of the bones. Children who drink water containing fluoride in excess of the state MCL of 2 mg/L may get mottled teeth
Selenium; Selenium is an essential nutrient. However, some people who drink water containing selenium in excess of the MCL over many years may experience hair or fingernail losses, numbness in fingers or toes, or circulation system problems.
Nitrates; Infants below the age of six months who drink water containing nitrite in excess of the MCL may become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blueness of the skin
Gross Alpha; Certain minerals are radioactive and may emit forms of radiation known as photons and beta radiation. Some people who drink water containing beta and photon emitters in excess of the MCL over many years may have an increased risk of getting cancer
Uranium; Some people who drink water containing uranium in excess of the MCL over many years may have kidney problems or an increased risk of getting cancer.
Lead; Infants and children who drink water containing lead in excess of the action level may experience delays in their physical or mental development. Children may show slight deficits in attention span and learning abilities. Adults who drink this water over many years may develop kidney problems or high blood pressure
Copper; Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time may experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years may suffer liver or kidney damage. People with Wilson's Disease should consult their personal doctor.

A source water assessment was conducted for **Wells 2a, 10, 14, 15 and 16.**

The sources are most vulnerable to the following activities associated with contaminants detected in the water supply:
Sewer collection systems; Hardware/lumber/parts store and Housing-high density.

The sources are considered most vulnerable to the following activities not associated with any detected contaminants: Parking lots/malls; Office buildings/complexes and Transportation corridors – Roads/Streets